

## Ball Pivot

### Patent Claims

1. Said ball pivot (3) of a ball and socket joint for a motor vehicle, with a said pivot (2) and a said joint ball (1), which is connected to same, wherein a said recess (12) with a said magnet (13) arranged therein is provided in the said ball pivot (3), **characterized in that** a said intermediate space (17), which is filled with a said nonmagnetic material (16) to fix the said magnet (13), is formed between the said jacket surface (14) of the said magnet (13) and the said inner wall (15) of the said recess (12).

2. Ball pivot in accordance with claim 1, **characterized in that** the said magnet (13) is directly in contact by one of its said front sides (18) with the said ball pivot (3).

3. Ball pivot in accordance with claim 1 or 2, **characterized in that** the said magnet (13) is cylindrical or truncated cone-shaped.

4. Ball pivot in accordance with one of the above claims, **characterized in that** the said recess (12) is cylindrical.

5. Ball pivot in accordance with one of the above claims, **characterized in that** the said magnet (13) is arranged in a said ring (24) made of a nonmagnetic material.

6. Ball pivot in accordance with claim 5, **characterized in that** the said ring (24) is bonded in the

said recess (12) together with the said magnet (13).

7. Ball pivot in accordance with one of the above claims, **characterized in that** the said magnet (13) is embedded in plastic.

8. Ball pivot in accordance with claim 7, **characterized in that** the plastic is injected onto the said magnet (13) by injection molding.

9. Ball pivot in accordance with claim 7 or 8, **characterized in that** the said body formed by the said magnet (13) and the said plastic is pressed into the said recess (12).

10. Ball pivot in accordance with one of the claims 7 through 9, **characterized in that** the said body formed by the said magnet (13) and the said plastic is bonded in the said recess (12).

11. Ball pivot in accordance with one of the above claims, **characterized in that** the said magnet (13) is inserted into a said stamped and bent part (26) made of a nonmagnetic material.

12. Ball pivot in accordance with claim 11, **characterized in that** the said stamped and bent part (26) consists of spring bronze.

13. Ball pivot in accordance with claim 11 or 12, **characterized in that** the said stamped and bent part (26) is pressed together with the said magnet (13) into the said recess (12).

14. Ball pivot in accordance with claim 13, **characterized in that** the said stamped and bent part (26) is elastically supported against the said inner wall (15) of the said recess (12).

15. Ball pivot in accordance with one of the claims 11 through 14, **characterized in that** the said magnet (13) is pressed into the said stamped and bent part (26).

5 16. Ball pivot in accordance with one of the above claims 11 through 15, **characterized in that** the said stamped and bent part (26) has a ring-shaped design and has two said concentric legs (27, 28) and a said web (29) connecting these to one another.

17. Ball pivot in accordance with claim 16, **characterized in that** the said inner leg (27) is embedded in a said plastic sleeve (30).

10 18. Ball pivot in accordance with claim 17, **characterized in that** the said magnet (13) is arranged in the said plastic sleeve (30).

19. Ball pivot in accordance with one of the above claims, **characterized in that** the said ball pivot consists of a ferromagnetic material, especially a ferromagnetic steel, at least in the area of the said recess.

15 20. Ball pivot in accordance with claim 19, **characterized in that** the said ball pivot consists entirely of a ferromagnetic material, especially a ferromagnetic steel.

21. Ball and socket joint for a motor vehicle, with a said ball and socket joint housing (5) and with a

said ball pivot (3), which is mounted therein rotatably and pivotably and has a said pivot (2) and a said joint ball (1) connected thereto, and in which a said recess (12) with a said magnet (13) arranged therein is provided, **characterized in that** a said intermediate space (17), which is filled with a said nonmagnetic material (16) for fixing the said magnet (13), is formed between the said jacket surface (14) of the said magnet (13) and the said inner wall (15) of the said recess (12).